

Claims

1. A solar thermal tile, the tile comprising a transparent portion for permitting the entry of sunlight into a heating space below the tile, the tile further comprising a chassis, formed separately from the transparent portion, on which the transparent portion is mounted, wherein the chassis comprises at least one protrusion on at least one edge, the protrusion being adapted to form an overlapping relationship with a second tile when correctly mounted adjacent thereto.
- 10 2. The solar thermal tile of Claim 1, wherein the chassis comprises a non-transparent material.
- 15 3. The solar thermal tile of Claim 2, wherein the non-transparent material is a plastic.
4. The solar thermal tile of Claims 2 or 3, wherein the chassis is a moulded component.
- 20 5. The solar thermal tile of Claim 2, wherein the non-transparent material is a metal.
6. The solar thermal tile of Claim 5, wherein the chassis comprises folded sheet metal.
- 25 7. The solar thermal tile of any preceding claim, the chassis comprising at least one aperture.
8. The solar thermal tile of Claim 7, wherein the transparent portion is located to cover the at least one aperture.

9. The solar thermal tile of any preceding claim, wherein the transparent portion has peripheral edges, and the chassis is arranged to support the transparent portion at said peripheral edges.
- 5 10. The solar thermal tile of any preceding claim, wherein the transparent portion comprises sheet material.
11. The solar thermal tile of any preceding claim, wherein the transparent portion is formed from polycarbonate material.
- 10 12. A solar thermal tile according to any preceding claim, further incorporating a rear overlap surface, the rear overlap surface being formed to support a third tile placed above the solar thermal tile.
- 15 13. A set of tiles, incorporating at least one solar thermal tile according to any preceding claim.
14. The set of tiles of Claim 13, further comprising at least one photovoltaic tile, the photovoltaic tile comprising a photovoltaic cell.
- 20 15. The set of tiles of Claim 14, wherein the photovoltaic tile further comprises a chassis, the chassis being substantially identical in external appearance to that of the at least one solar thermal tile.
- 25 16. The set of tiles of Claims 14 or 15, wherein the chassis of the photovoltaic tile further comprises at least one hole to allow airflow.
17. The set of tiles of any of Claims 13 to 16, wherein the solar thermal tile has at least one dimension which is a multiple of the equivalent dimension of another tile in the set.

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18. A building comprising a surface, the surface comprising a set of tiles according to Claim 13 to 17, the building further comprising a fluid heating system mounted in a heating space behind one or more solar thermal tiles.
- 5 19. A solar thermal tile as substantially described herein, with reference to the accompanying drawings.
20. A set of tiles, comprising a solar thermal tile and a solar photovoltaic tile substantially as described herein, with reference to the accompanying drawings.